

**UNIVERSITI TEKNOLOGI MARA**

**PREVALENCE OF LOW BACK PAIN AND MANUAL  
WORK AMONG NURSES**

**NUR ATIQA BINTI RAMLI**

**Project paper submitted in a partial fulfillment of the requirements for  
the degree of  
Bachelor in Environmental Health and Safety (Hons.)**

**Faculty of Health Sciences**

**JULY 2014**



### Declaration by Student

Project entitled "Prevalence of Low Back Pain and Manual Work among Nurses" is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature and acknowledgement of collaborative research and discussions. The project was done under the guidance of Dr Subramaniam A/L Karuppannan as Project Supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

Student's Signature:



.....  
(Nur Atiqah Binti Ramli)

2011262238

901121035620

Date:..... 15-11-2014



## **ACKNOWLEDGEMENT**

First of all, I would pay my gratitude to Almighty Allah who gave me the passion to finish the study. At the same time thank you so much with respect to my parents and family specially my mother Lijah Ahmad who always pray for my bless and easiest in complete the study.

Then I gratefully appreciate to my supervisor, Dr Subramaniam A/L Karuppannan and also Madam Wan Khadijah binti Wan Yusoff for their guidance and support without which I could not have come to this stage.

I also thankful to my dearest friend Rodiah Sahray, Siti Nur Hayati Abd Aziz, Norfadilah Hilmi and all of my other friends for their direct and indirect inspirations, suggestions and supports during conducting the study. My special thanks to Miss Murni Amirra Binti Mohd Aminuddin for their kind contribution to the result.

Last but not least, I would like to give thanks to the participants for their cooperation of this study. Thanks to all who always are my well-wisher and besides me as friend without any expectation.

Thank you so much.



## TABLE OF CONTENTS

### TITLE PAGE

ACKNOWLEDGEMENT	i
-----------------	---

### TABLE OF CONTENTS

LIST OF TABLES	ii
----------------	----

LIST OF FIGURES	iii
-----------------	-----

LIST OF APPENDICES	iv
--------------------	----

LIST OF ABBREVIATION	v
----------------------	---

ABSTRACT	vi
----------	----

### CHAPTER 1: INTRODUCTION

1.1	Background Information	1
1.2	Problem Statement	5
1.3	Study Justification	4
1.4	Study Objectives	7
	1.4.1 General Objective	8
	1.4.2 Specific Objective	8
	1.4.3 Study Hypothesis	8
1.5	Conceptual Framework	10
1.6	Operational Definition	



## **Abstract**

### **Prevalence of Low Back Pain and Manual Work among Nurses**

**Nur Atiqah Binti Ramli**

***Purpose:*** To find out the prevalence of low back pain among nurses in a general hospital and its related factors. ***Objectives:*** To study the prevalence of musculoskeletal disorders (low back pain) and manual work among nurses in a general hospital and its related ergonomic risk factors. The study design was cross-sectional. Total 249 samples were selected conveniently for this study from a general hospital and the samples were stratified sampling which were six departments or units included in this study. The departments included were Medical Department, Surgical Department, Orthopedic Department, Pediatric Department, High Dependency Unit and Intensive Care Unit. Data was collected by using of self-administrated questionnaire which was adopted and modified from Standardized Nordic MSD Questionnaires. Microsoft Office Excel 2007 was used for data analysis which focused via table, pie chart and bar chart. ***Results:*** The finding of the study was that the 75% nurses suffered from LBP. Most of them had been suffered from mild pain was 76% and moderately 23%. The highest factor causing back pain was lifting task. ***Conclusion:*** The investigator could from this study that more than half nurses were suffering from LBP. Result of this study also provided background information about LBP that may be useful in prevention and treatment of LBP, thereby reducing its prevalence.

***Keywords:*** LBP, nurses, lifting, prevalence, department